

Management Plan

PRC-MP-SH-40015

Chemical Management Plan

Revision 0, Change 0

**Published: 6/25/09
Effective: 6/25/09**

**Project: CH2M HILL Plateau Remediation Company
Topic: Occupational Safety & Industrial Hygiene**

**Technical Authority: D.A. Freeman
Functional Manager: R.J. Shupe**

<h1>Administrative Use</h1>

PRC-MP-SH-40015
Chemical Management Plan

Published Date: 6/25/09

Effective Date: 6/25/09

CHANGE SUMMARY

AJHA: N/A

Periodic Review Due Date: 6/25/2014

HRB Date: N/A

Validation Date: N/A

Rev. 0, Chg. 0 PR#: PRC-09-0690

USQ Screen Number: Exempt

Description of Change

New procedure

Chemical Management Plan

Published Date: 6/25/09

Effective Date: 6/25/09

TABLE OF CONTENTS

1.0	INTRODUCTION	4
1.1	Purpose	4
1.1	Scope	4
1.2	Applicability	4
1.3	Implementation	4
2.0	RESPONSIBILITIES.....	5
2.1	Vice President, Waste and Fuels Management.....	5
2.2	Project Vice Presidents (or designees)	5
2.3	Lead, Chemical Management Program.....	5
2.4	CHPRC Chemical Management Point-of-Contact (POC)	6
2.5	Facility Chemical Custodians (FCC).....	7
2.6	Emergency Preparedness.....	7
2.7	Project/Facility Waste Operations	7
2.8	Managers/Line Managers	8
2.9	All Employees	8
2.10	Subcontractors.....	8
3.0	PROGRAMMATIC INTERFACES	8
3.1	Chemical Handling.....	9
4.0	GENERAL SAFETY	9
5.0	SOURCES	10
5.1	References	10
6.0	APPENDIXES	10

Chemical Management Plan

Published Date: 6/25/09

Effective Date: 6/25/09

1.0 INTRODUCTION

This management plan establishes a coordinated program implementing a consistent approach to the management of chemicals by CH2M HILL Plateau Remediation Company (CHPRC) and its subcontractors.

1.1 Purpose

The goals of the chemical management plan include:

- Protect the worker, general public, and the environment
- Meet all applicable regulatory and statutory requirements
- Track and control chemical inventories.

This plan describes the basis under which CHPRC performs chemical management activities in compliance with requirements such as Department of Energy (DOE) Order 151.1, the Occupational Safety and Health Act (OSHA) – 29 CFR 1910, Subpart Z, and the Emergency Planning, and Community Right-To-Know Act (EPCRA) – 40 CFR Parts 355 and 370.

1.1 Scope

Specific objectives include:

- Meet operational needs
- Minimize chemical inventories
- Minimize chemical hazards during storage
- Minimize waste generation.

The objectives are achieved by establishing a CHPRC Chemical Management Program within the framework of the Integrated Environment, Safety, and Health Management System (ISMS). The Chemical Management Program requirements will be implemented using a graded approach. This means that the degree of application will be based on the complexity of chemical management operations and the severity of associated hazards.

1.2 Applicability

This Chemical Management Plan establishes a coordinated life-cycle management process that controls activities involving hazardous chemicals. These objectives apply to the elements of a Chemical Management Program, including acquisition, tracking, and final disposition of chemicals. For purposes of the Chemical Management Program, the term “chemical” refers to pure chemicals, mixtures of chemicals, and chemical products, which may present hazards to the workers, to the public, and/or to the environment. This management plan applies to all facilities, projects, and/or subcontractors on the Hanford Site managed by CHPRC.

This procedure does not apply to wastes, tank wastes, and/or radioactive materials.

1.3 Implementation

This management plan is effective upon publication.

Chemical Management Plan**Published Date: 6/25/09****Effective Date: 6/25/09**

Periodic reviews and updates of this plan will be conducted when changes occur:

- In requirements and reference sources
- In responsibilities (individual and/or organizational)
- Resulting from streamlining or simplification opportunities.

2.0 RESPONSIBILITIES**2.1 Vice President, Waste and Fuels Management**

Serves as steward for the overall administration, management, and maintenance of the chemical management program.

2.2 Project Vice Presidents (or designees)

Ensure that Facility Chemical Custodians are identified for each facility and project and provided with adequate time and resources to allow them to meet their expectations as dictated by this plan and the procedure Chemical Management Process (PRC-PRO-SH-10468).

2.3 Lead, Chemical Management Program

The Chemical Management program Lead performs as point of contact to represent the chemical management program as follows:

- Integrates and coordinates the implementation and continuance of the CHPRC Chemical Management Program
- Identifies chemical management issues in a timely manner and proposes recovery actions, as appropriate
- Maintains and implements this Chemical Management Program Plan within CHPRC and its subcontractors.
- Reviews this management plan at least every two years for adequacy for chemical management requirements and updates, as appropriate
- Facilitates minimizing the exposure to hazardous chemicals
- Assists in the chemical inventory data, data certifications, and contractor certifications (as applicable) in support of the Hanford Site efforts to prepare the following EPCRA reports and notification:
 - Emergency Planning Notification as required by 40 CFR 355
 - Tier II Emergency and Hazardous Chemical Inventory report as required by 40 CFR 370
 - Toxic Chemical Release Inventory report as required by 40 CFR 372
 - Provide information to support the Chemical Management Program performance assessment
 - Ensure tracking and trending of deficiencies and observations
- Incorporates the chemical management program into the Integrated Environmental, Safety, and Health Management System (ISMS) plan.

Chemical Management Plan

Published Date: 6/25/09**Effective Date: 6/25/09**

- The Chemical Management Program Lead is responsible for integrating the chemical management program with the infrastructural functions that are necessary to support and control chemical management at CHPRC, including:
 - Procurement
 - Environmental
 - Environmental reporting, documentation, and permitting
 - Pollution prevention, waste minimization, and waste operations
 - Safety and Health
 - Chemical safety
 - Industrial hygiene
 - Occupational medicine
 - Hazard communication
 - Fire protection
 - Material Safety Data Sheet (MSDS) system
 - Emergency preparedness and response planning
 - Emergency Preparedness training
 - Emergency preparedness drills and exercises
 - Emergency responders
 - Project/Facility Waste Operations
 - Transportation
 - Waste Management
 - Quality Assurance.

2.4 CHPRC Chemical Management Point-of-Contact (POC)

- Acts as point-of-contact for chemical management
- Ensures information, such as chemical inventories, and MSDS(s), are made available to support organizations
- Monitors or assists in the approval process for the purchase of hazardous chemicals through the Plateau Remediation Contract Material Services System (PRCMSS) including but not limited to:
 - Ensures applicable MSDS is available through the Hanford MSDS program
 - Applies pollution prevention measures as appropriate
 - Ensures that required chemical inventories are performed and CITS information is updated as needed
- Assists projects that have identified chemicals that have no programmatic need.
- Provides training on CITS to new and current Facility Chemical Custodians

Chemical Management Plan

Published Date: 6/25/09

Effective Date: 6/25/09

- Collects performance data from facilities and report performance indicators

2.5 Facility Chemical Custodians (FCC)

NOTE: *Facility Chemical Custodian (FCC) will be used in lieu of Facility Chemical POC (POC) or Hazardous Material Coordinator (HMC).*

Approve the purchase of hazardous chemicals through the PRCMSS including but not limited to:

- Ensure applicable MSDS is available through the Hanford MSDS program
- Apply pollution prevention measures as appropriate
- Manage assigned facility chemical inventories
- Ensure that all chemical containers at the facility are appropriately barcoded unless in fixed inventories
- Ensure updated MSDSs are forwarded to Hanford Site MSDS administrator
- Provide updated inventory tracking information to the CHPRC Chemical Management POC
- Conduct periodic assessments of the facility chemical inventories
- If necessary, attend subcontractor kick-off and closure meetings
- Review and verify subcontractor Chemical Inventory Worksheet (site form: A-6003-412)
- Ensure that subcontractor chemical inventory data is tracked and usage data is captured.
- Provide updated chemical inventory data in support of the Hanford Site efforts to prepare required EPCRA reports and notifications

Facility chemical custodians will consult the safety professional (e.g., Industrial Hygienist and/or Industrial Safety, Fire Protection) assigned to a project or facility for questions pertaining to storage and handling instructions, expiration dates, and chemical compatibilities.

2.6 Emergency Preparedness

Provide guidance to the FCC in the evaluation and control of hazardous chemicals in support of a comprehensive emergency management system.

- Ensure initial hazardous material screen is completed per PRC-PRO-EM-7647.
- Ensure emergency planning in place as required, to support receipt of chemicals into facility.

2.7 Project/Facility Waste Operations

Assist in the acquisition of new chemicals by evaluating for waste disposition and/or alternative chemical products.

Chemical Management Plan

Published Date: 6/25/09**Effective Date: 6/25/09**

Provide the facilities with designation and disposal pathways for chemical products that cannot be used, recycled or redistributed.

2.8 Managers/Line Managers

Ensure chemical management operations, including acquisition, storage, transportation, and final disposition are in compliance with the requirements of PRC-RC-SH-13299, *Hazard Communication* and this plan.

Ensure employees are provided with facility-specific and on-the-job hazard training

2.9 All Employees

Ensure quantities of new chemicals and variations of similar chemicals ordered are minimized to the extent possible to avoid storage of unused chemicals.

Before using chemicals, read the manufacturer's label and Material Safety Data Sheet (MSDS) and note the warnings

Ensure chemicals are stored, segregated, and rotated in accordance with the recommendations of the manufacturer, or as indicated by the accepted industrial practices. Contact Industrial Hygiene/Industrial Safety or CHPRC Chemical Management POC for specifications

Ensure chemical storage locations are kept clean and orderly. Keep chemical/product containers tightly covered.

2.10 Subcontractors

Subcontractors will comply with their contract provisions. These provisions include the management of chemicals.

Procedures applicable to subcontractors include:

- HNF-MP-29238, Assurance System Description
- HNF-RD-10606, Fire Protection Program Requirements
- PRC-RD-SH-13299, Hazard Communication
- PRC-PRO-SH-10468, Chemical Management Process

Service providers who provide, use, and/or remove chemicals as part of their service, (e.g., painters) are exempt from the requirements of this section.

3.0 PROGRAMMATIC INTERFACES

CHPRC interfaces with onsite and offsite organizations for emergency preparedness, transportation, waste management and environmental compliance. These interfaces are controlled with interface control documents and subcontracts. Attachment A shows significant interfaces.

Chemical Management Plan**Published Date: 6/25/09****Effective Date: 6/25/09****3.1 Chemical Handling**

Hazardous chemicals are used in a variety of manners, from custodial, maintenance, laboratory, process, and deactivation.

All chemicals are to be evaluated by qualified professionals for physical hazards, health hazards and environmental impacts.

Chemical evaluations will use a graded approach based on the complexity and hazard of the chemical and its intended use.

- Evaluation results are made available to the employee to enhance the understanding of the hazards involved with handling of the chemical product.

The amounts and types of chemicals may vary from bulk to consumer size products.

Items that do not require inventory include items for personal use, food or food additives, structural material and articles, normal office supplies, mineral oil, sealed batteries (excluding lead acid batteries), waste, consumer products (as defined in PRC-PRO-SH-10468, Rev. 1) or empty containers.

Hazard assessments are performed by IH/IS and necessary controls are identified and implemented to ensure incompatible or dangerous chemical reactions do not occur as a result of legacy hazardous chemicals and decontamination and decommissioning efforts, as required by PRC-SH-RD-13299, *Hazard Communication*.

4.0 GENERAL SAFETY

Exposure to hazardous materials shall be minimized and/or mitigated to the maximum extent possible by implementing the following hierarchy of controls:

- Engineering Controls
- Administrative Controls
- Personal Protective Equipment.

Material Safety Data Sheets (MSDS) for materials to be handled shall be reviewed before starting work, as guidelines for appropriate protective clothing and respiratory protection equipment to be used for the task. Selection and use of Personal Protective Equipment (PPE) requires input from Industrial Health/Safety (IH/IS).

Chemical Management Plan

Published Date: 6/25/09

Effective Date: 6/25/09

5.0 SOURCES**5.1 References**

DOE Order 151.1c, Emergency Planning and Community Right-To-Know Act (EPCRA) – 40 CFR Parts 355 and 370.

Occupational Safety and Health Act (OSHA) – 29 CFR 1910, Subpart Z

HNF-RD-9118, *Fire Protection Design/Operations Criteria*

HNF-RD-10606, *Fire Protection Program Requirements*

PRC-MP-TQ-011, *CHPRC Qualification and Training Plan*

PRC-POL-HR-11390, *Safe and Drug Free Workplace*

PRC-POL-SH-5053, *CH2M HILL Plateau Remediation Company Safety, Health, Security, Quality, and Environment Policy*

PRC-PRO-AC-123, *Requesting Materials and Services*

PRC-PRO-AC-335, *Use and Control of Purchasing Card*

PRC-PRO-IRM-8310, *Document Control Program*

PRC-PRO-IRM-10588, *Records Management Processes*

PRC-PRO-NS-062, *Unreviewed Safety Question Process*

PRC-PRO-NS-8317, *Safety Basis Implementation and Maintenance*

PRC-PRO-QA-259, *Graded Approach*

PRC-PRO-SH-10468, *Chemical Management Process*

PRC-RD-SH-10994, *Occupational Carcinogen Control*

PRC-RD-SH-11198, *Storing, Using and Handling Compressed Gases*

PRC-RD-TP-7900, *Transportation and Packaging Program Requirements*

PRC-RD-SH-13299, *Hazard Communication*

6.0 APPENDIXES

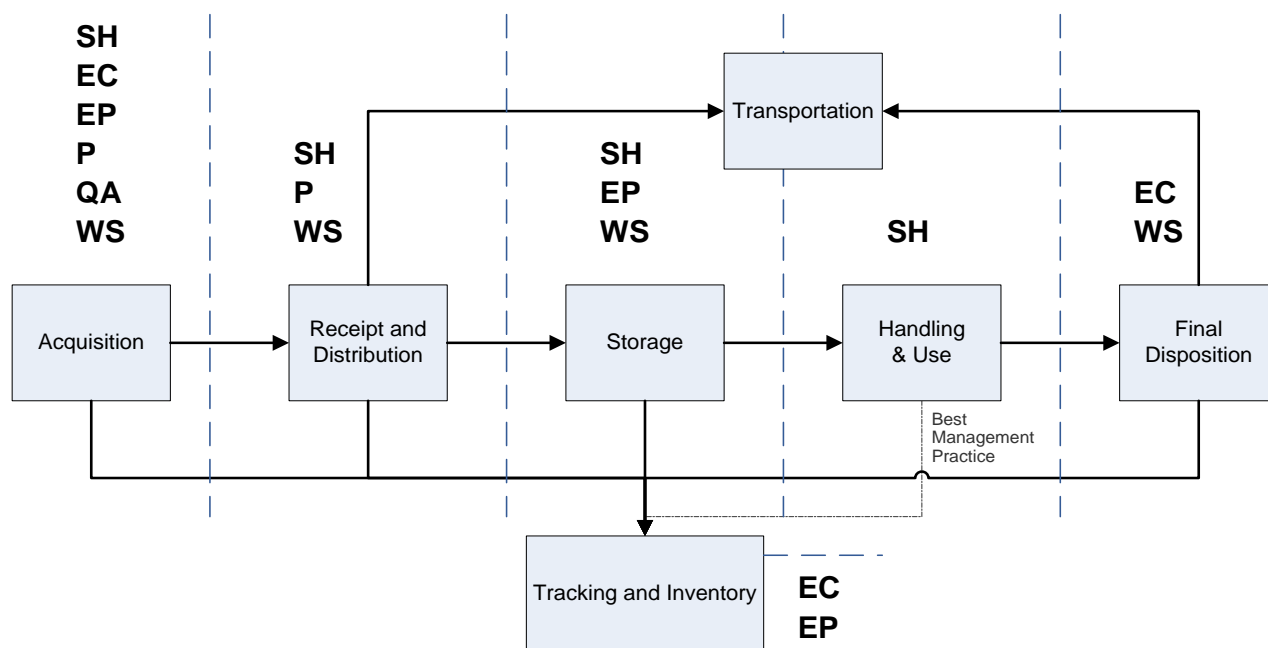
Appendix A - Chemical Management Interfaces

Chemical Management Plan

Published Date: 6/25/09

Effective Date: 6/25/09

Appendix A - Chemical Management Interfaces



LEGEND

SH Safety and Health
EC Environmental Compliance
EP Emergency Preparedness

P Procurement
QA Quality Assurance
WS Waste Services